The Warm Home

THE
MEYER FURNACE CO.
PEORIA, ILL.

Catalog B-23

The Warm Home
Cast Furnace

Catalog No. B-23

A PRODUCT OF

THE MEYER FURNACE CO.

PEORIA, ILLINOIS

EDW. HINE & CO., PRINTERS, PEORIA

FOREWORD

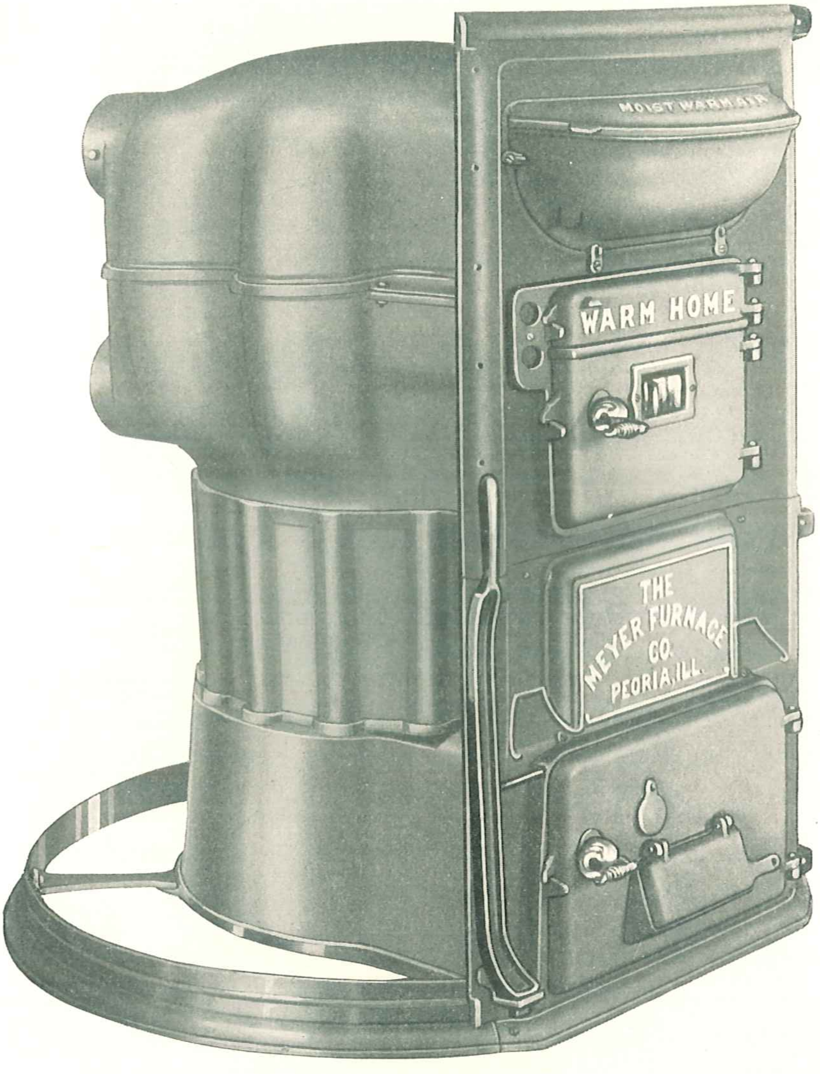
THIRTY-FIVE years ago the Meyer Interests in Peoria, Illinois, knew warm air furnace heating as it existed in that day, and it can be truthfully said that they have always persistently and aggressively used their time, finances and efforts to develop warm air heating. The benefits derived by all have been many and valuable, and to this day warm air heating goods bearing the Meyer name are nationally conceded to be high-grade, standard goods.

The latest addition to their excellent lines is fully illustrated and described in this catalog, and they take pleasure and pride in introducing

The Warm Home
Cast Furnace

TO SATISFY a desire of long standing for ideal heating was the point foremost in the minds of the designers of this truly remarkable furnace. The WARM HOME is a most powerful heater, and absolutely fool-proof; it is strong and substantial and capable of generating a maximum of heat from a minimum amount of fuel consumed. It is instantly responsive—yet easily controlled—and will remain responsive year after year because of clean, bright and live radiating surfaces, making cleaning unnecessary.

In the illustration opposite, attention is invited particularly to the massive construction of the WARM HOME Furnace, and the general lines of construction. Note also its features—the ideally located water pan, placed where healthful moisture is obtainable; the large double feed door, the first feature inspected by the average prospective buyer of a furnace; the convenient shaking lever, and provision for attaching water coil for range boiler.


MOIST WARM AIR
WARM HOME
THE MEYER FURNACE CO. PEORIA, ILL.

The Warm Home Cast Furnace

(without casing)

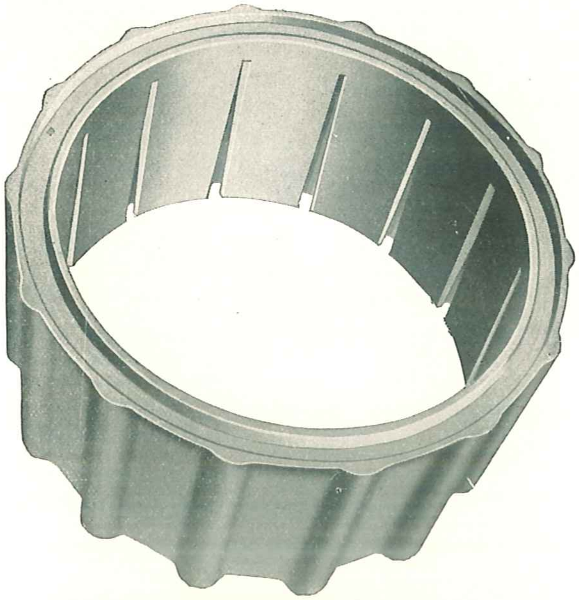
Note particularly the correctly located water pan, the large double feed door, and the conveniently and permanently located shaking lever.

ON THE opposite page are shown a top and bottom view of the WARM HOME Fire Pot, illustrating in a measure, the weight, strength and construction of the most important part of a furnace.

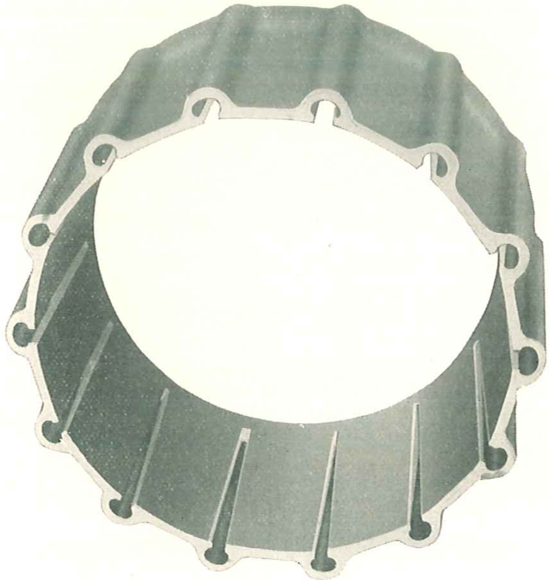
By means of the slots, heated air is admitted over the fire, and in this manner burnable gases arising from the fuel are consumed, resulting in a hotter flame and at the same time obtaining all possible benefit from the fuel consumed. The slots in the WARM HOME Fire Pot are so constructed that they are self-cleaning, being larger at the bottom than at the top.

The fire pot itself is made slightly larger at the bottom than at the top, permitting the fuel bed to settle toward the grate, thus eliminating the undesirability of "packing" experienced with fire pots of other types.

As the governing factor in arriving at the power of a furnace is determined by the size of the grate, and not the fire pot size, it can be readily understood that we can rightfully claim greater power from a fire pot with perpendicular lines, than a corresponding size furnace where top of fire pot measurement is given.



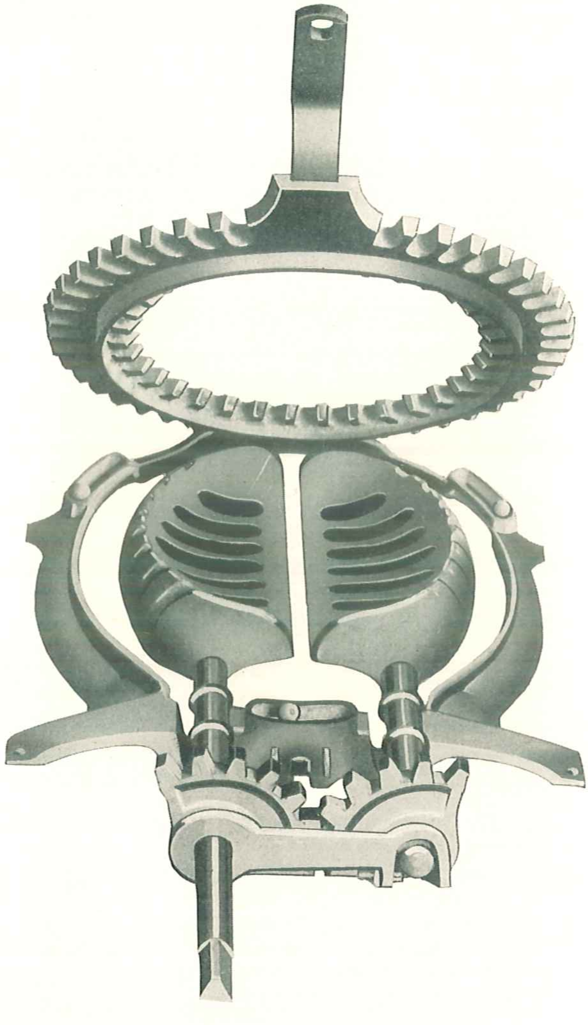
Top View Fire Pot



Bottom View Fire Pot

Fire Pot of The Warm Home Furnace

Particular attention is invited to the self-cleaning slots and deep cement groove.



The Grate of the Warm Home Furnace

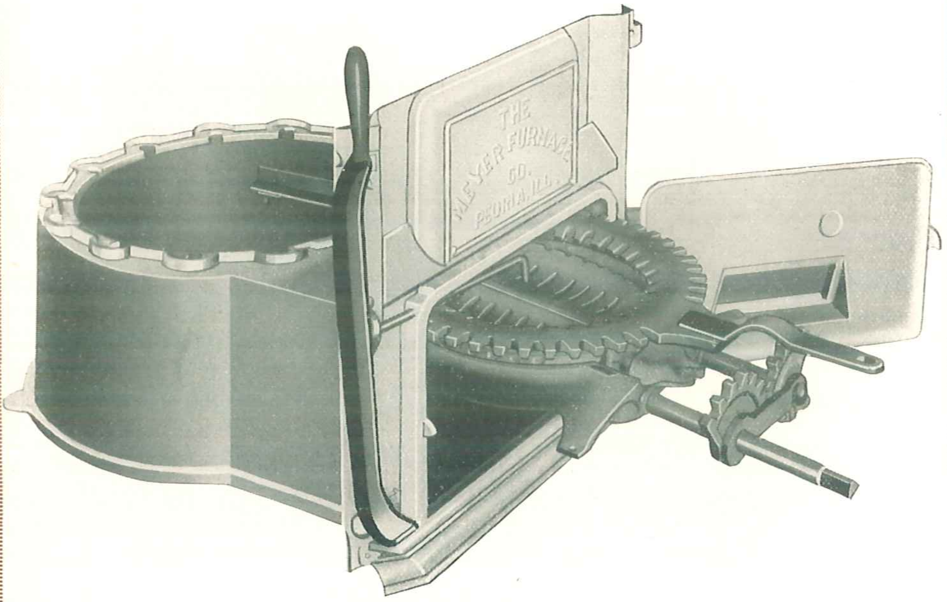
Built to operate in connection with the slotted fire pot. Note the ball bearings for ease of operation.

THE WARM HOME Grate is shown in detail on the opposite page. As shown in the illustration on page 10, the grate ring is operated by means of the shaking lever, shaking down ashes from the outer edge of the fire, insuring a hot fire at a point where it is most effective.

The grate ring operates on ball bearings, is well balanced and by means of the correctly designed shaking lever, ashes can be easily shaken down by a child—a task which, in the ordinary furnace, taxes the strength of a man.

Any large pieces, clinkers, etc., accumulating in the fire pot may be easily dumped into the ash pit by operating the duplex bars with the shaker handle.

Any fuel—soft or hard coal, coke or wood may be burned with satisfactory results, but the furnace is designed for burning soft coal.



Ash Pit Section of The Warm Home Furnace

Note how easily the entire grate may be removed.
This ash pit is deep and roomy.

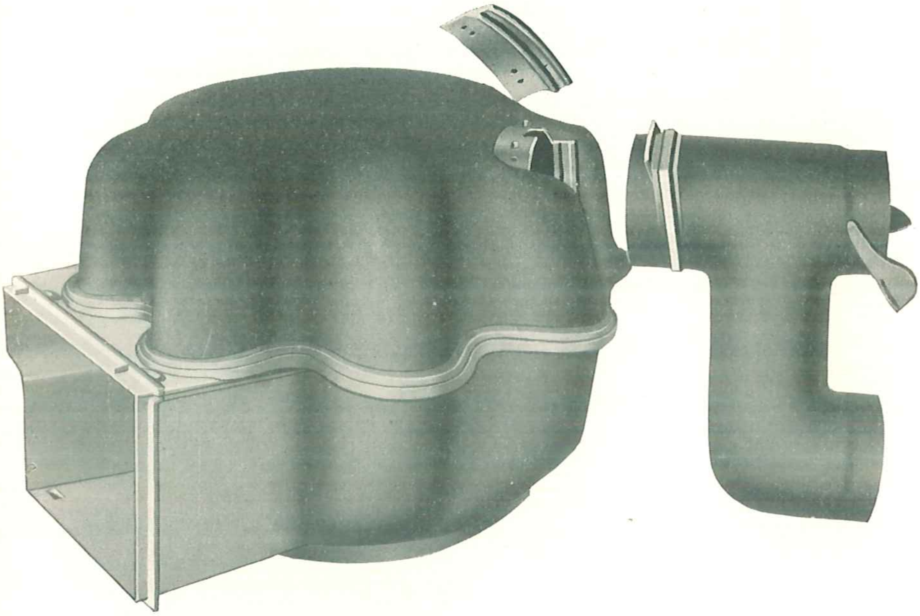
THE illustration opposite shows the deep, roomy substantial ash pit; also notice how easily the entire grate may be removed. The lever shown operates the shaking ring to shake down ashes from the outside edge of the fire. The grate may be "dumped" by means of a shaker handle inserted thru the port hole, which closes automatically when shaker is removed.

The doors on the WARM HOME Furnace are ground to fit tight, and no dust or gases from the ash pit enter the basement when shaking or dumping grates.

The ash pit is amply large not to require frequent removal of ashes. The liberal size of the ash pit door permits the removal of ashes with ease.

IN THE illustration on the opposite page, of the feed section and dome section and the one-piece diving flue, attention is invited to the enormous heating surface of the combustion dome. Another very important feature is the diving flue connection to the dome, so clearly illustrated. When installing, the slot on the dome is filled with cement, after which the diving flue is dropped into place (the tongue on the diving flue fitting into the groove in the dome section) after which the two grooves on the cap-plate are filled with cement and the plate bolted into place, thus insuring a perfect joint at a point that is most important.

Notice the liberal proportions of the feed pouch, amply large and free from any obstruction. An offset is provided for water coil to be connected to range boiler to heat water for domestic purposes.



The Dome Section, Feed Section and the One-Piece Diving Flue

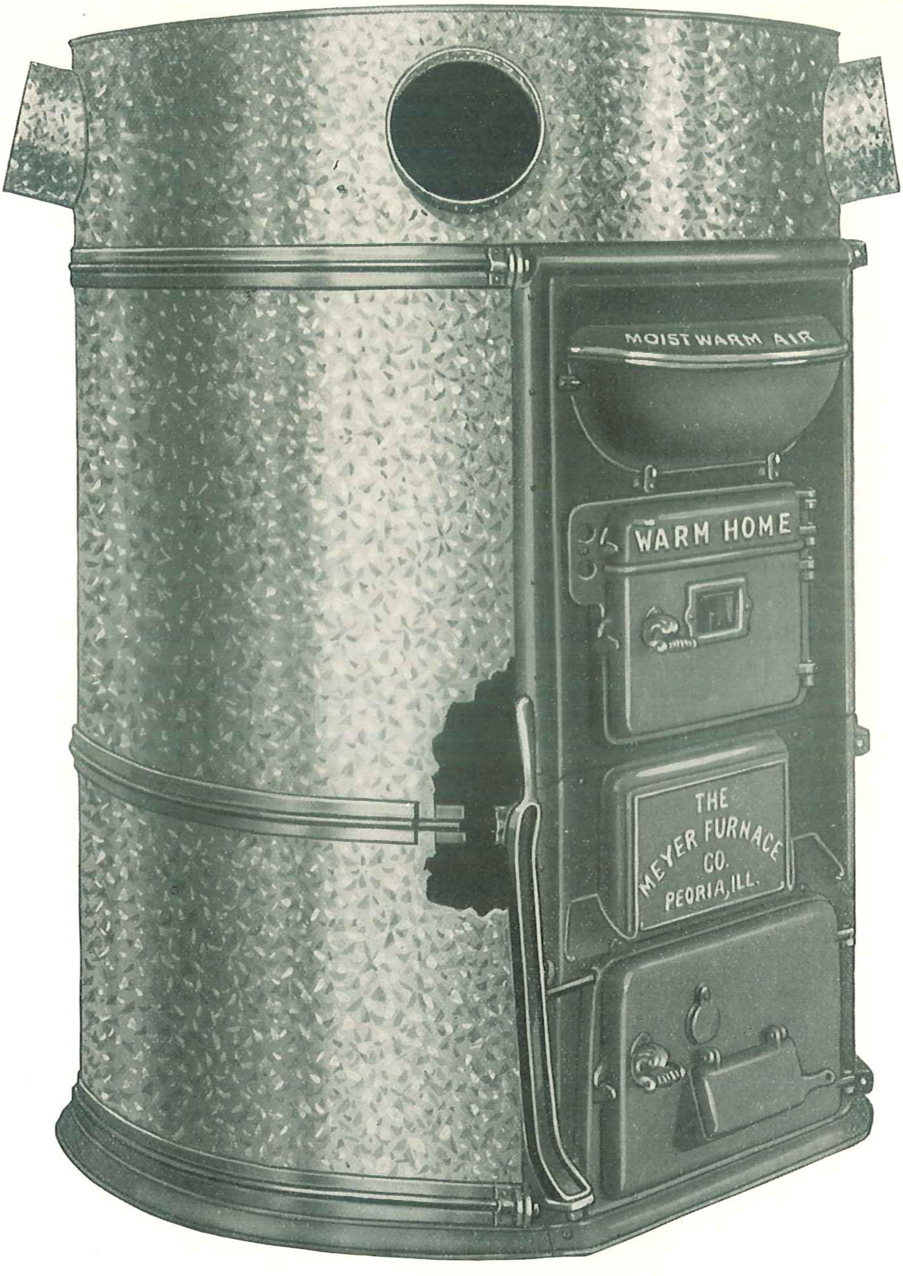
Note particularly the perfect connection of diving flue to dome section and the immense radiating surfaces of these parts.

THE casing, or jacket, of a furnace is certainly of genuine importance, and well worthy of careful consideration. We point with pride to the arrangement we have provided to assure tight casing joints on the WARM HOME Furnace. This is clearly illustrated on the opposite page.

The inner casing ring is first placed in position, and the casing proper attached as on the ordinary furnace, but, on the WARM HOME Furnace, an extra ring, made especially for the purpose, is placed immediately over the joint and drawn up tightly with draw-bolts making a tight joint, preventing cellar air, coal dust, gases from ashes or cellar, or basement sweepings from entering the casing joints and being carried to the living rooms above.

Another point not to be overlooked by the dealer is that this feature makes installation easier.

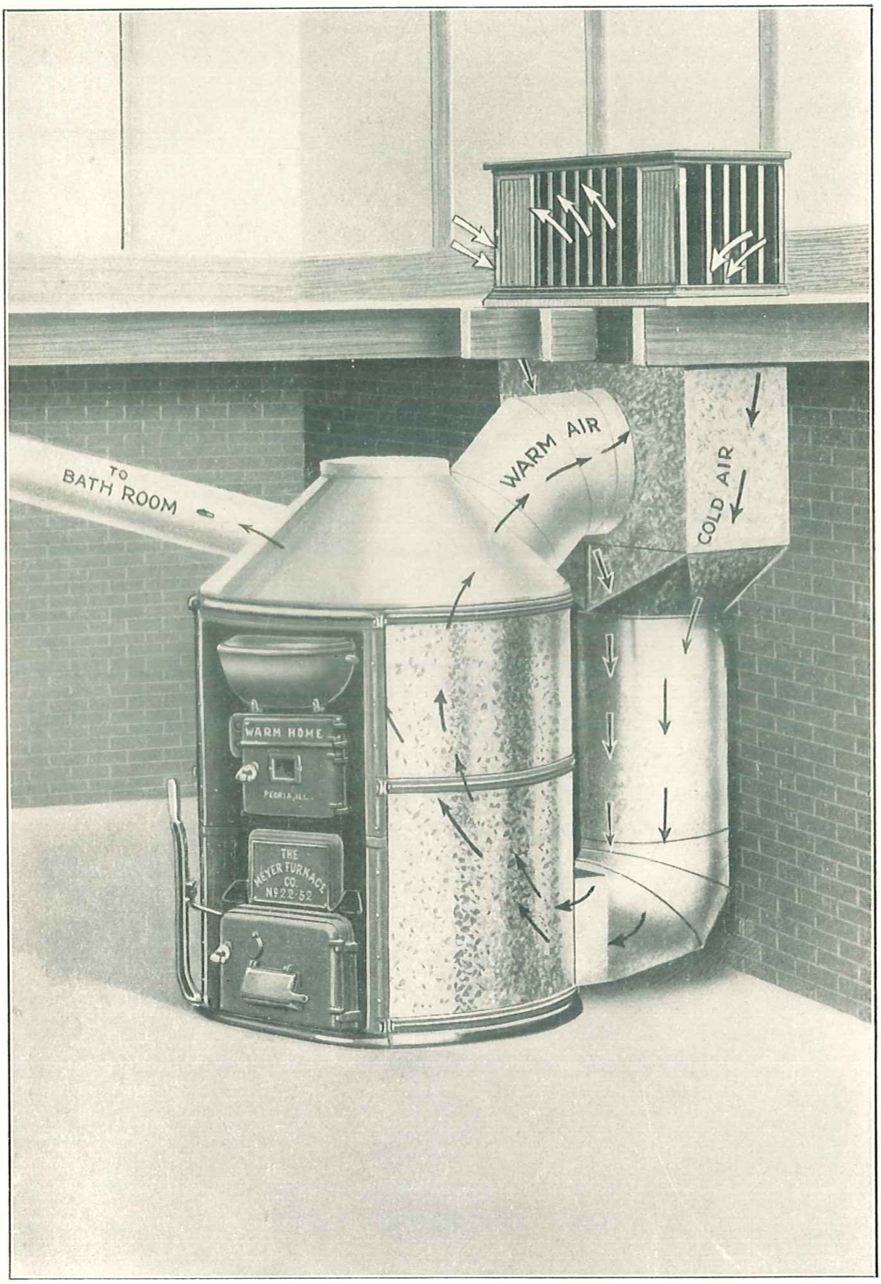
The construction of the front, it will also be noticed, is such that no cutting or piecing is necessary.



The Warm Home Cast Furnace

(with casing)

Here attention is particularly invited to but one of the distinctive features of this furnace—the double leak-proof casing ring at every casing joint.



The Warm Home Furnace in Connection with the Majestic Duplex Register

The ideal one-register style of installation.

The WARM HOME Majestic One Register Installation

THIS, in a true sense of the word, is the ideal one-register type of installation. Briefly, its distinct points of advantage are that:

The register locates against a wall out of the way.

The register harmonizes with room furnishings, the top and panels being furnished in either oak, mahogany, craftsman leather or tapestry finish.

The register occupies only about one-half the floor space of a floor level register of equal capacity.

It eliminates the necessity of cutting floor in center of room, and the register does not interfere with rugs.

It diffuses heat out into rooms instead of the heat going directly to the ceiling from the register.

It assures a better circulation of heat and reduces objectionable floor drafts.

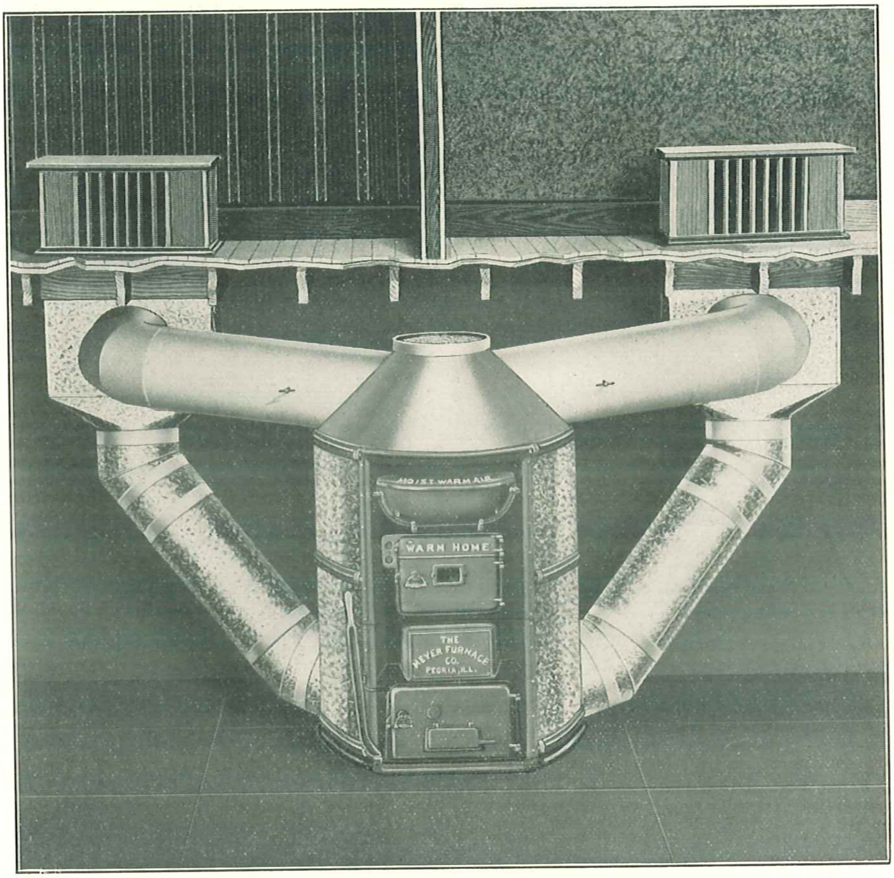
The register is sanitary and does not become a receptacle for dust and dirt from sweepings.

This style of installation does not limit a furnace to one register, should others be required.

It makes a furnace more efficient, assuring maximum fuel economy.

In fact, this style of installation overcomes every objection to a floor-level one-register system.

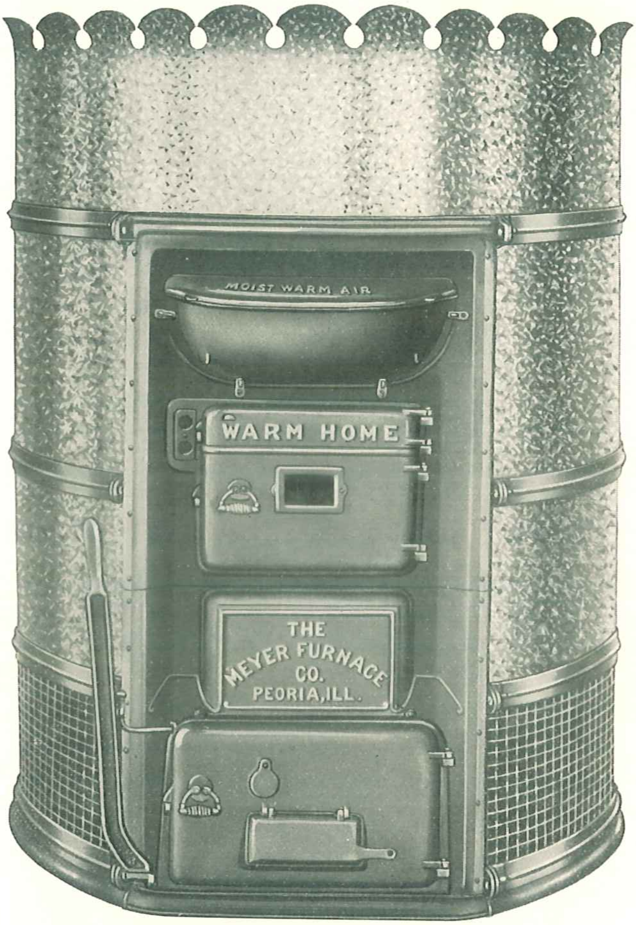
We recommend the use of the 20-20 size Majestic Register in connection with the No. 18-44 WARM HOME, and the 24-24 size register in connection with the 20-48 WARM HOME. When a WARM HOME Furnace of greater capacity is used in connection with Majestic Equipment, the "twin installation" illustrated on page 18 should be used. Two of the 18-18 size registers should be used on the 22-52 WARM HOME and two of the 20-20 size registers on the No. 24-56 WARM HOME Furnace.



The Warm Home-Majestic Twin Register Installation

A most desirable type of installation where it is preferable to have more than a single register heating plant.

This "twin register" style of installation is necessary when the two largest sizes of the WARM HOME Furnace are used in connection with Majestic Equipment, as explained on the preceding page.



The Warm Home Furnace in Room Heater Style

This is the regular WARM HOME Furnace with ornamental open top casing. It is an ideal heater for schoolrooms, churches, stores, shops, and other large rooms that cannot be heated by a furnace set in basement. It heats by circulation, the cold air entering thru the opening at the bottom and being thrown out, heated, thru the top, producing an even temperature thruout the room. A heater of this style should be set on a brick or cement base.

Detailed Information

THE WARM HOME CAST FURNACE

Size Furnace...	18-44	20-48	22-52	24-56
Grate Size.....	18-in.	20-in.	22-in.	24-in.
Casing Size....	44-in.	48-in.	52-in.	56-in.
Height Furnace Proper.....	49-in.	52-in.	54-in.	56-in.
Shipping Weight of Furnace, less Casing.	1,065 lbs.	1,200 lbs.	1,400 lbs.	1,500 lbs.
Warm Air Pipe Area Available ..	380 sq. in.	480 sq. in.	580 sq. in.	680 sq. in.

Casing Measurements

(No allowance made for necessary laps for seams)

The hood should be as high as conditions will permit, but never less than 12 inches from the top of furnace dome.

Furnace Size	Lower Section	Upper Section	Hood
18-44	26″ x 9′ 6″	20″ x 9′ 6″	11′ 6⅛″x18
20-48	28″ x10′ 3″	20½″x10′ 3″	12′ 6⅛″x18
22-52	30″ x10′ 11″	20½″x10′ 11″	13′ 6¾″x18
24-56	32¼″x11′ 10¾″	20½″x11′ 10¾″	14′ 6″ x18

TO determine the size of a furnace necessary to heat a building, measure each room separately according to the following rule:

For each square foot of glass surface in a room use one square inch of pipe area; to each ten square feet of outside exposed wall surface, use one square inch of pipe area; for each one hundred feet of cubical space, use one square inch of pipe area.

For example:

If a room should contain 72 square feet of glass surface, 210 square feet of exposed wall, and 2,016 cubic feet of space, it would require a warm air pipe of a cross-sectional area of at least 113 square inches, or a 12-inch pipe. This size pipe is chosen because it would require 72 square inches of pipe area to properly care for the glass surface, 21 square inches for the exposed wall surface, and 20 square inches for the cubical contents, making the pipe area required 113 square inches, which a 12-inch pipe is capable of supplying.

The cold air registers and pipes must be of sufficient size to at least equal the combined area of all warm air pipes.

The Warm Home Furnace

(By Parts)

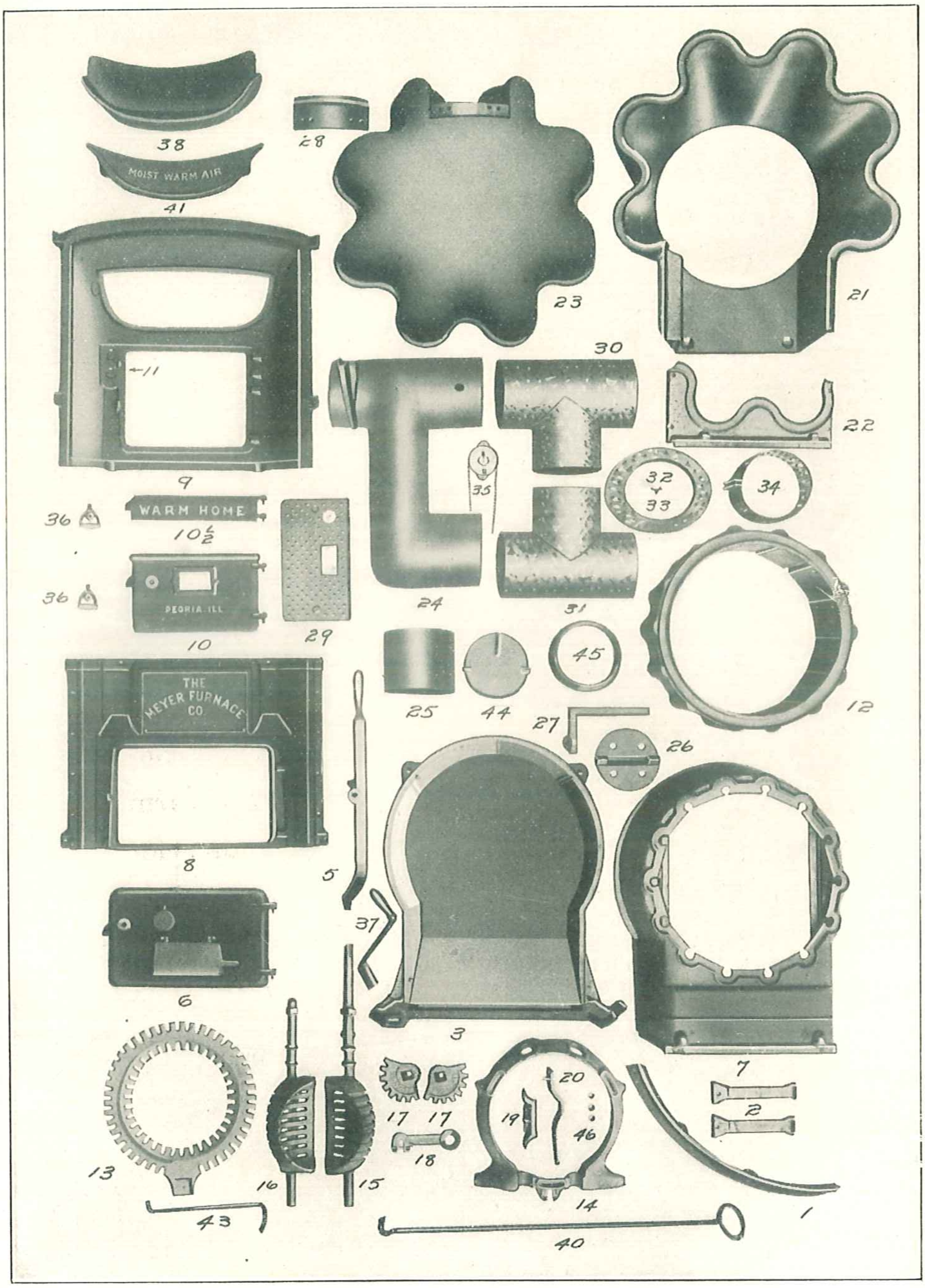
WHEN reference is made to parts, in correspondence or in ordering, please give correct name or number (preferably both). Reference numbers are given on the opposite page, in connection with illustrations of parts, and correct names are shown, opposite numbers, below.

Where more than one piece of the same kind is required for a furnace, it is indicated by the number immediately following the name of the part.

1. Section Base Casing Ring (4)
2. Base Casing Ring Bracket (2)
3. Ash Pit Bottom
4. Ash Pit Draft Door
5. Shaking Lever
6. Ash Pit Door
7. Ash Pit Section
8. Lower Section Front
9. Upper Section Front
10. Feed Door

10½. Upper Section Feed Door

11. Water Heater Plate
12. Fire Pot
13. Grate Ring
14. Grate Rest
15. Long Grate Bar
16. Short Grate Bar
17. Grate Bar Cogs (2)
18. Grate Bar Yoke
19. Grate Bearing Clamp
20. Shaking Cleat
21. Feed Section
22. Feed Pouch Cover Plate
23. Dome Section
24. Diving Flue
25. Inside Protecting Stub
26. Direct Draft Damper Plate
27. Direct Draft Damper Stem
28. Diving Flue Connection Plate
29. Feed Door Lining
30. Upper Galvanized Smoke Tee
31. Lower Galvanized Smoke Tee
32. Upper Smoke Pipe Casing Collar
33. Lower Smoke Pipe Casing Collar
34. Smoke Tee Connecting Sleeve
35. Regulator
36. Door Handles (2)
37. Shaker Handle
38. Water Pan
39. Water Pan Lugs (4)
40. Poker
41. Water Pan Cover
42. Door Mica
43. Shaking Lever Connecting Rod
44. Check Damper Lid
45. Check Damper Frame
46. Grate Ball Bearings (3)
47. Shaker Hole Flap
48. Mica Frame



The Warm Home Furnace

(By Parts)

In Conclusion

THE illegitimate use of the word "best" has led people to disregard its real meaning. This word is being continually used, but seldom backed up by evidence and proof, many claiming to make and sell the best, but

There is but one all cast warm air furnace that is unexcelled.

This catalog has been carefully made for you, the dealer, in as clear, concise and brief a manner as possible, with the sole purpose of truthfully acquainting you with all the details of construction in this truly remarkable all cast warm air furnace, in order that its points of superior merit may be clearly understood, thus placing you in possession of information that will enable you to be the judge.

If you have given the WARM HOME Furnace the careful consideration it is worthy of, you will agree that it is not an ordinary furnace, nor simply a furnace that is different, but one that is truly in a class by itself, and unexcelled.